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| EXAMINER PIHONAK, SARAH | | | | |
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/579,076

Applicant(s)

FUNKE ET AL.

Examiner

SARAH PIHONAK

Art Unit

1627

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 October 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1, 5 and 6 is/are pending in the application.
- 4a) Of the above claim(s) 5 and 6 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/22)
Paper No(s)/Mail Date 10/27/2009
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

This application, filed on 9/28/2007, is a national stage entry of PCT/EP04/12330, filed on 10/30/2004.

Priority

This application claims foreign priority to the following applications: 10353280.3, filed on 11/14/2003, and 102004021564.2, filed on 5/3/2004. Certified English translations of the foreign priority documents have been received; therefore, acknowledgement is made for foreign priority for the date of 11/14/2003.

Declaration under 37 CFR § 1.132

1. The declaration under 37 CFR 1.132 filed 10/27/2009 is insufficient to overcome the rejection of claims 1, 5, and 6 based upon the rejection under 35 USC § 103(a) as set forth in the last Office action because: the declaration is not fully commensurate in scope with the claims. The amended claims are drawn to a composition comprised of a synergistically effective amount of an anthranilamide of formula (I-1), and at least one pyrethroid selected from acrinathrin, betacyfluthrin, cypermethrin, deltamethrin, lambda-cyhalothrin, taufluvinate, and gamma-cyhalothrin, where the compound of formula (I-1) and the pyrethroid are present in a ratio from 50:1 to 1:5. The declaration shows a synergistic combination between compound I-1-4 and cyhalothrin, betacyfluthrin, and deltamethrin, in ratios of 1:1, 1:25, and 1:5. However, this result reflects just one compound of formula (I-1), compound I-1-4, and the claims are drawn to a combination of a broader range of compounds of formula (I-1). Additionally, it is noted that the specification shows synergistic combinations resulting from compound I-1-9 and

deltamethrin, lambda-cyhalothrin, betacyfluthrin, in ratios from 25:1 and 1:1. As the claims are drawn to a synergistic combination of a broader range of compounds of formula (I-1) than compositions comprised of compounds I-1-4 and I-1-9, the synergistic results shown in the specification and the declaration are not fully commensurate in scope with the claimed invention. Therefore, the declaration is insufficient to overcome the rejection of the claims under 35 USC § 103(a), as being unpatentable over Lahm et. al., WO 03/015518, in view of the US Patent No. 6,472,417, and Colby, Weeds, pp. 20-22.

Response to Remarks

2. Applicant's arguments filed 10/27/2009 have been fully considered but they are not persuasive. The Applicants have argued that the WO '518 publication discloses hundreds of compounds, and that there any teaching or suggestion by to combine the compounds of formula (I-1) with the pyrethroid compounds is lacking. The examiner disagrees, as the WO '518 publication teaches that the compounds of formula (I-1), including the elected compound, 3-bromo-N-[4-chloro-2-methyl-6-((methylamino)carbonyl)phenyl]-1-(3-chloro-2-pyridinyl)-1H-pyrazole-5-carboxamide, which is known commercially as coragen, can be combined with other active pesticide agents, including the elected compound of formula 2, cyfluthrin. The US '417 patent teaches that N-phenyl pyrazole compounds and pyrethroids, such as cyfluthrin, are combined to form a synergistic pesticidal effect. The Applicants have argued that the US '417 patent teaches N-phenyl pyrazole compounds which are different from the claimed compounds of formula (I-1). However, as the N-phenyl pyrazole compounds

taught by the US '417 patent and the claimed compounds of formula (I-1) are both used as pesticides, one of ordinary skill in the art would have been motivated to substitute the claimed phenyl pyrazole compounds for the N-phenyl pyrazole compounds taught by the US '417 patent, with the expectation of success. Additionally, the Applicants have argued that the US '417 patent teaches that the combination of the N-phenyl pyrazole and pyrethroids has a synergistic effect against termites. While this argument has been fully considered, it is noted that termites, as insects, are also considered pests, and as such, the US '417 teaches that the combination of an N-phenyl pyrazole compound and a pyrethroid provides a synergistic pesticidal effect. Furthermore, it is noted that the US '417 patent teaches the combination as being a synergistically effective insecticide. The Applicants have argued that the reference of Colby was mischaracterized, as while Colby teaches a method of calculating synergism, it does not teach a method of predicting synergism. This argument has been fully considered, but is not found persuasive. It is acknowledged that Colby does not teach a method for predicting synergism. However, this reference was not used for this teaching, as the WO '518 publication and the US '417 patent in combination teach that the combination of N-phenyl pyrazoles, such as those claimed, and pyrethroids provide synergistic pesticidal activity. The Colby reference is used as a method to determine when synergism is truly present, and as such, would be used to determine the optimum weight ratios to provide synergistic combinations.

The Applicants have stated that the declaration submitted under 37 CFR 1.132 on 10/27/2009 provides unexpected results over the prior art. However, as discussed

supra, the results of the declaration and specification are not fully commensurate in scope with the claimed invention. However, in further consideration of amended claim 1, a modified rejection has been made, which will be discussed in detail below.

Accordingly, this action is made **NON-FINAL**.

Applicants' arguments, regarding the rejection of claim 1 for obviousness type double patenting over claims 6-7 and 9-10 of co-pending Application No. 10/578512, in view of the US Patent No. 6,472,417, have been fully considered, and are found persuasive. Therefore, the rejection of claim 1 for obviousness type double patenting over the claims of co-pending application No. 10/578512 is withdrawn.

The Applicants have cancelled claims 2-4 and 7; therefore, the rejection of these claims is considered moot. Claims 5 and 6 were previously withdrawn due to the restriction requirement.

Applicants are reminded that, in the event that claim 1 is found allowable, a rejoinder of claim 1 with method claims 5-6 will be considered.

3. Claim 1 was examined.
4. Claim 1 is rejected.

Claim Rejections-35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

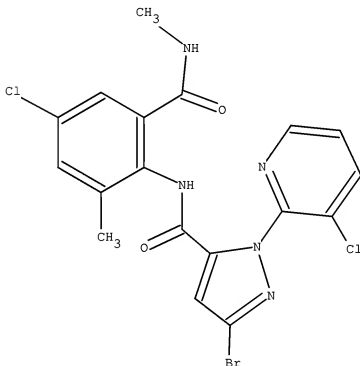
1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

7. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

8. Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lahm et. al. WO 2003/015518 publication, in view of Kodama et. al., US Patent No. 6,472,417.

Claim 1 is drawn to a composition comprised of a synergistically effective amount of an anthranilamide of formula (I-1), such as the elected compound, 3-bromo-N-[4-chloro-2-methyl-6-((methylamino)carbonyl)phenyl]-1-(3-chloro-2-pyridinyl)-1H-pyrazole-5-carboxamide, and a pyrethroid selected from acrinathrin, betacyfluthrin, cypermethrin, deltamethrin, lambda-cyhalothrin, taufluvinate, and gamma-cyhalothrin, in which the ratio of 3-bromo-N-[4-chloro-2-methyl-6-((methylamino)carbonyl)phenyl]-1-(3-chloro-2-

pyridinyl)-1H-pyrazole-5-carboxamide to pyrethroid compound ranges from 50:1 to 1:5. The structure of the elected compound, 3-bromo-N-[4-chloro-2-methyl-6-((methylamino)carbonyl)phenyl]-1-(3-chloro-2-pyridinyl)-1H-pyrazole-5-carboxamide, is shown below:



Lahm et. al. teaches a pesticide composition comprised of the claimed compounds of formula (I-1), and particularly discloses the claimed compound, 3-bromo-N-[4-chloro-2-methyl-6-((methylamino)carbonyl)phenyl]-1-(3-chloro-2-pyridinyl)-1H-pyrazole-5-carboxamide (p. 3, lines 24-27; p. 42, Example 11; p. 89, lines 2-4). Lahm et. al. also teaches the combination of 3-bromo-N-[4-chloro-2-methyl-6-((methylamino)carbonyl)phenyl]-1-(3-chloro-2-pyridinyl)-1H-pyrazole-5-carboxamide with additional active agents, such as the pyrethroids cyfluthrin (as well as beta- and lambda cyfluthrin), cypermethrin, and deltamethrin (p. 142, claim 9). Lahm et. al. also

teaches that 3-bromo-N-[4-chloro-2-methyl-6-((methylamino)carbonyl)phenyl]-1-(3-chloro-2-pyridinyl)-1H-pyrazole-5-carboxamide is a potent pesticide, yet provides significant protection to plants (p. 115, compound 531, p. 128, lines 7-8 and 25, p. 129, lines 10-11 and 27, p. 131, lines 20 and 22, p. 136, lines 1-8).

Lahm et. al. does not explicitly teach that 3-bromo-N-[4-chloro-2-methyl-6-((methylamino)carbonyl)phenyl]-1-(3-chloro-2-pyridinyl)-1H-pyrazole-5-carboxamide is combined with pyrethroids such as beta-cyfluthrin, cypermethrin, and deltamethrin in a ratio from 50:1 to 1:5.

Kodama et. al. teaches that the combination of N-phenyl pyrazole compounds with pyrethroid compounds, such as cypermethrin, and deltamethrin result in a synergistic pesticidal effect (Abstract; column 1, lines 27-39 and lines 43-49; column 2, lines 38-39; column 3, lines 10-11). Particularly, Kodama et. al. teaches that the ratio of N-phenyl pyrazole compound to pyrethroid, for a synergistic effect, ranges from 10:1 to 1:10 (column 3, lines 15-18), which is within the weight ratio range claimed. Additionally, Kodama et. al. teaches that other pyrethroid compounds can be used to provide synergistic combinations (column 2, lines 18-26).

One of ordinary skill in the art, at the time of the invention, would have been motivated to combine the N-phenyl pyrazole compound, 3-bromo-N-[4-chloro-2-methyl-6-((methylamino)carbonyl)phenyl]-1-(3-chloro-2-pyridinyl)-1H-pyrazole-5-carboxamide, with pyrethroid compounds such as cypermethrin and deltamethrin, because Lahm et. al. teaches that 3-bromo-N-[4-chloro-2-methyl-6-((methylamino)carbonyl)phenyl]-1-(3-chloro-2-pyridinyl)-1H-pyrazole-5-carboxamide is a potent pesticide which can be

readily combined with pyrethroid agents such as cypermethrin, and deltamethrin, and Kodama et. al. teaches that the combination of N-phenyl pyrazole compounds with pyrethroids including cypermethrin and deltamethrin results in a synergistic pesticide effect. As the N-phenyl pyrazole compounds taught by Kodama et. al., and the claimed compound, 3-bromo-N-[4-chloro-2-methyl-6-((methylamino)carbonyl)phenyl]-1-(3-chloro-2-pyridinyl)-1H-pyrazole-5-carboxamide, both possess pesticidal activity, one of ordinary skill in the art would have expected success in substituting 3-bromo-N-[4-chloro-2-methyl-6-((methylamino)carbonyl)phenyl]-1-(3-chloro-2-pyridinyl)-1H-pyrazole-5-carboxamide for the N-phenyl pyrazole compounds in the composition taught by Kodama et. al. Kodama et. al. teaches that N-phenyl pyrazole compounds, when combined with pyrethroid compounds, provide a synergistic pesticide. Kodama et. al. teaches that the weight ratio of N-phenyl pyrazole to pyrethroid ranges from 10:1 to 1:10, which is within the weight ratio range claimed. Furthermore, the optimization of weight ratio ranges for enhanced pesticidal effect and stability would have been considered routine and obvious to one of ordinary skill in the art, and as such it would have been obvious to combine the N-phenyl pyrazole and pyrethroids in the ratio range as claimed, from 50:1 to 1:5. As the pesticide 3-bromo-N-[4-chloro-2-methyl-6-((methylamino)carbonyl)phenyl]-1-(3-chloro-2-pyridinyl)-1H-pyrazole-5-carboxamide is a N-phenyl pyrazole, it would have been prima facie obvious to one of ordinary skill in the art, at the time of the invention, to combine this agent with pyrethroids such as deltamethrin, cypermethrin, and others, for a synergistic pesticide effect, in the weight ratio range as claimed.

Information Disclosure Statement

9. The information disclosure statement (IDS) submitted on 10/27/2009 was filed after the mailing date of the non-final action on 4/28/2009. The submission is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement has been considered by the examiner.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to SARAH PIHONAK whose telephone number is (571)270-7710. The examiner can normally be reached on Monday-every other Friday 8:00 AM - 5:30 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sreeni Padmanabhan can be reached on (571)272-0629. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

S.P.

/SREENI PADMANABHAN/
Supervisory Patent Examiner, Art Unit 1627